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NEWS 2 "Ask CAS" for self-help around the clock  
NEWS 3 SEP 09 CA/Caplus records now contain indexing from 1907 to the  
present  
NEWS 4 Jul 15 Data from 1960-1976 added to RDISCLOSURE  
NEWS 5 Jul 21 Identification of STN records implemented  
NEWS 6 Jul 21 Polymer class term count added to REGISTRY  
NEWS 7 Jul 22 INPADOC: Basic index (/BI) enhanced; Simultaneous Left and  
Right Truncation available  
NEWS 8 AUG 05 New pricing for EUROPATFULL and PCTFULL effective  
August 1, 2003  
NEWS 9 AUG 13 Field Availability (/FA) field enhanced in BEILSTEIN  
NEWS 10 AUG 15 PATDPAFULL: one FREE connect hour, per account, in  
September 2003  
NEWS 11 AUG 15 PCTGEN: one FREE connect hour, per account, in  
September 2003  
NEWS 12 AUG 15 RDISCLOSURE: one FREE connect hour, per account, in  
September 2003  
NEWS 13 AUG 15 TEMA: one FREE connect hour, per account, in  
September 2003  
NEWS 14 AUG 18 Data available for download as a PDF in RDISCLOSURE  
NEWS 15 AUG 18 Simultaneous left and right truncation added to PASCAL  
NEWS 16 AUG 18 FROSTI and KOSMET enhanced with Simultaneous Left and Right  
Truncation  
NEWS 17 AUG 18 Simultaneous left and right truncation added to ANABSTR  
NEWS 18 SEP 22 DIPPR file reloaded  
  
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MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),  
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STRUCTURE FILE UPDATES: 22 SEP 2003 HIGHEST RN 591204-55-6  
DICTIONARY FILE UPDATES: 22 SEP 2003 HIGHEST RN 591204-55-6

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

Please note that search-term pricing does apply when  
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Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP  
PROPERTIES for more information. See STN Note 27, Searching Properties  
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<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> s spermidine/cn  
L1 1 SPERMIDINE/CN

=> d l1

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 124-20-9 REGISTRY  
CN 1,4-Butanediamine, N-(3-aminopropyl)- (8CI, 9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN **Spermidine (6CI)**  
OTHER NAMES:  
CN 1,5,10-Triazadecane  
CN 4-Azaoctane-1,8-diamine  
CN N-(3-Aminopropyl)-1,4-butanediamine  
CN N-(3-Aminopropyl)-1,4-diaminobutane  
CN N-(3-Aminopropyl)-4-aminobutylamine  
CN N-(4-Aminobutyl)-1,3-diaminopropane  
CN Spermidin  
FS 3D CONCORD  
MF C7 H19 N3  
CI COM  
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS,  
BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CEN, CHEMCATS,  
CHEMINFORMRX, CHEMLIST, CIN, CSCHM, DDFU, DETHERM\*, DRUGU, EMBASE,  
GMELIN\*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK\*, MSDS-OHS,  
NAPRALERT, NIOSHTIC, PIRA, PROMT, RTECS\*, SPECINFO, SYNTHLINE,  
TOXCENTER, USPAT2, USPATFULL  
(\*File contains numerically searchable property data)  
Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*  
(\*\*Enter CHEMLIST File for up-to-date regulatory information)

H<sub>2</sub>N-(CH<sub>2</sub>)<sub>4</sub>-NH-(CH<sub>2</sub>)<sub>3</sub>-NH<sub>2</sub>

**\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\***

8527 REFERENCES IN FILE CA (1907 TO DATE)  
220 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
8536 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
86 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> file uspatfull  
COST IN U.S. DOLLARS

| SINCE FILE | TOTAL   |
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| ENTRY      | SESSION |
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FULL ESTIMATED COST

FILE 'USPATFULL' ENTERED AT 12:15:59 ON 23 SEP 2003  
CA INDEXING COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 23 Sep 2003 (20030923/PD)  
FILE LAST UPDATED: 23 Sep 2003 (20030923/ED)  
HIGHEST GRANTED PATENT NUMBER: US6625813  
HIGHEST APPLICATION PUBLICATION NUMBER: US2003177560  
CA INDEXING IS CURRENT THROUGH 23 Sep 2003 (20030923/UPCA)  
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 23 Sep 2003 (20030923/PD)  
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Aug 2003  
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Aug 2003

>>> USPAT2 is now available. USPATFULL contains full text of the <<<  
>>> original, i.e., the earliest published granted patents or <<<  
>>> applications. USPAT2 contains full text of the latest US <<<  
>>> publications, starting in 2001, for the inventions covered in <<<  
>>> USPATFULL. A USPATFULL record contains not only the original <<<  
>>> published document but also a list of any subsequent <<<  
>>> publications. The publication number, patent kind code, and <<<  
>>> publication date for all the US publications for an invention <<<  
>>> are displayed in the PI (Patent Information) field of USPATFULL <<<  
>>> records and may be searched in standard search fields, e.g., /PN, <<<  
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>>> classifications, or claims, that may potentially change from <<<  
>>> the earliest to the latest publication. <<<

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substance identification.

=> s 124-20-9/rn  
L2 218 124-20-9/RN

=> s 12 and pd<1994  
1774017 PD<1994  
(PD<19940000)  
L3 56 L2 AND PD<1994

=> s 13 and composition  
685627 COMPOSITION  
L4 34 L3 AND COMPOSITION

=> d 14 1-34

L4 ANSWER 1 OF 34 USPATFULL on STN  
 AN 97:10017 USPATFULL  
 TI Amides of antibiotic GE 2270 factors  
 IN Tavecchia, Paolo, Rho, Italy  
 Lociuoro, Sergio, Milan, Italy  
 Ciabatti, Romeo, Novate Milanese, Italy  
 Selva, Enrico, Gropello Cairoli, Italy  
 PA Gruppo Lepetit SPA, Varese, Italy (non-U.S. corporation)  
 PI US 5599791 19970204  
 WO 9212172 19920723 <--  
 AI US 1993-84189 19930701 (8)  
 WO 1992-EP2 19920102  
 19930701 PCT 371 date  
 19930701 PCT 102(e) date  
 PRAI EP 1991-100123 19910103  
 DT Utility  
 FS Granted  
 LN.CNT 2389  
 INCL INCLM: 514/009.000  
 INCLS: 540/451.000  
 NCL NCLM: 514/009.000  
 NCLS: 540/451.000  
 IC [6]  
 ICM: C07K007-56  
 ICS: A61K035-66  
 EXF 540/451; 514/9  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 2 OF 34 USPATFULL on STN  
 AN 93:109187 USPATFULL  
 TI Cyclic hydrocarbons with an aminoalkyl sidechain  
 IN Bundy, Gordon L., Kalamazoo, MI, United States  
 Wallach, deceased, Donald P., late of Richland, MI, United States by  
 Vera M. Wallach, legal representative  
 PA The Upjohn Company, Kalamazoo, MI, United States (U.S. corporation)  
 PI US 5274089 19931228 <--  
 AI US 1992-972693 19921106 (7)  
 RLI Division of Ser. No. US 1991-793486, filed on 13 Nov 1991, now patented,  
 Pat. No. US 5187299 which is a continuation of Ser. No. US 1991-657729,  
 filed on 20 Feb 1991, now abandoned which is a division of Ser. No. US  
 1989-394396, filed on 15 Aug 1989, now abandoned which is a division of  
 Ser. No. US 1987-117851, filed on 16 Jun 1987, now patented, Pat. No. US  
 4917826 which is a continuation of Ser. No. US 1986-102116, filed on 7  
 Oct 1986, now abandoned which is a continuation-in-part of Ser. No. US  
 1986-843120, filed on 24 Mar 1986, now abandoned which is a  
 continuation-in-part of Ser. No. US 1985-788995, filed on 18 Oct 1985,  
 now abandoned  
 DT Utility  
 FS Granted  
 LN.CNT 4555  
 INCL INCLM: 540/112.000  
 INCLS: 552/522.000  
 NCL NCLM: 540/112.000  
 NCLS: 552/522.000  
 IC [5]  
 ICM: C07J043-00  
 ICS: C07J041-00  
 EXF 540/112; 552/522  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 3 OF 34 USPATFULL on STN

AN 93:102706 USPATFULL  
 TI Strain of Corynebacterium glutamicum and method for producing L-lysine  
 IN Oh, Jong W., Seoul, Korea, Republic of  
 Kim, Seong J., Kyunggi-do, Korea, Republic of  
 Cho, Young J., Kyunggi-do, Korea, Republic of  
 Park, Nai H., Seoul, Korea, Republic of  
 Lee, Jae H., Seoul, Korea, Republic of  
 PA Cheil Sugar Co., Ltd., Seoul, Korea, Republic of (non-U.S. corporation)  
 PI US 5268293 19931207 <--  
 AI US 1992-851120 19920316 (7)  
 RLI Continuation of Ser. No. US 1990-500304, filed on 28 Mar 1990, now  
 abandoned  
 PRAI KR 1989-4136 19890330  
 DT Utility  
 FS Granted  
 LN.CNT 331  
 INCL INCLM: 435/252.100  
 INCLS: 435/115.000; 435/843.000  
 NCL NCLM: 435/252.100  
 NCLS: 435/115.000; 435/843.000  
 IC [5]  
 ICM: C12N001-20  
 ICS: C12P013-08  
 EXF 435/252.1; 435/843; 435/115  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 4 OF 34 USPATFULL on STN  
 AN 93:93696 USPATFULL  
 TI Method of purifying putrescine N-methyltransferase from tobacco plant  
 extract with a polyamine  
 IN Nakatani, Herbert Y., Midlothian, VA, United States  
 Malik, Vedpal S., Richmond, VA, United States  
 PA Philip Morris Incorporated, New York, NY, United States (U.S.  
 corporation)  
 PI US 5260205 19931109 <--  
 AI US 1990-613160 19901114 (7)  
 DT Utility  
 FS Granted  
 LN.CNT 1253  
 INCL INCLM: 435/193.000  
 INCLS: 435/815.000  
 NCL NCLM: 435/193.000  
 NCLS: 435/815.000  
 IC [5]  
 ICM: C12N009-10  
 EXF 435/193; 435/815  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 5 OF 34 USPATFULL on STN  
 AN 93:82867 USPATFULL  
 TI Complexes of nitric oxide with polyamines  
 IN Keefer, Larry K., Bethesda, MD, United States  
 Hrabie, Joseph A., Frederick, MD, United States  
 PA The Government of the United States of America as represented by the  
 Secretary of the Department of Health and Human Services, Washington,  
 DC, United States (U.S. government)  
 PI US 5250550 19931005 <--  
 AI US 1992-906479 19920630 (7)  
 RLI Continuation of Ser. No. US 1990-585793, filed on 20 Sep 1990, now  
 patented, Pat. No. US 5155137  
 DT Utility  
 FS Granted

LN.CNT 603  
 INCL INCLM: 514/357.000  
 INCLS: 544/382.000; 546/205.000; 546/206.000; 546/223.000; 546/244.000;  
 546/264.000; 546/329.000; 546/332.000; 514/319.000; 514/329.000;  
 514/332.000; 514/611.000  
 NCL NCLM: 514/357.000  
 NCLS: 514/319.000; 514/329.000; 514/332.000; 514/611.000; 544/382.000;  
 546/205.000; 546/206.000; 546/223.000; 546/244.000; 546/264.000;  
 546/329.000; 546/332.000  
 IC [5]  
 ICM: A01N043-40  
 EXF 546/244; 546/246; 546/247; 546/264; 546/332; 546/205; 546/206; 546/223;  
 546/329; 514/255; 514/315; 514/351; 514/332; 514/319; 514/329; 514/357  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 6 OF 34 USPATFULL on STN  
 AN 93:71991 USPATFULL  
 TI Aerosol beam microinjector  
 IN Mets, Laurens J., Chicago, IL, United States  
 PA Biotechnology Research and Development Corporation, Peoria, IL, United  
 States (U.S. corporation)  
 PI US 5240842 19930831 <--  
 AI US 1992-902478 19920619 (7)  
 RLI Continuation of Ser. No. US 1989-378256, filed on 11 Jul 1989, now  
 abandoned  
 DT Utility  
 FS Granted  
 LN.CNT 823  
 INCL INCLM: 435/172.300  
 INCLS: 435/172.100; 935/052.000; 935/053.000; 935/085.000  
 NCL NCLM: 435/470.000  
 NCLS: 800/293.000  
 IC [5]  
 ICM: C12N015-87  
 ICS: C12N015-89; C12N015-90  
 EXF 435/172.1; 435/172.3; 935/52; 935/53; 935/85  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 7 OF 34 USPATFULL on STN  
 AN 93:31513 USPATFULL  
 TI Purification of factor XIII  
 IN Bishop, Paul D., Fall City, WA, United States  
 Lasser, Gerald W., Lynnwood, WA, United States  
 PA ZymoGenetics, Inc., Seattle, WA, United States (U.S. corporation)  
 PI US 5204447 19930420 <--  
 AI US 1988-270714 19881114 (7)  
 DT Utility  
 FS Granted  
 LN.CNT 536  
 INCL INCLM: 530/381.000  
 INCLS: 530/380.000; 530/416.000; 530/417.000; 530/418.000; 530/419.000;  
 530/420.000; 530/421.000  
 NCL NCLM: 530/381.000  
 NCLS: 530/380.000; 530/416.000; 530/417.000; 530/418.000; 530/419.000;  
 530/420.000; 530/421.000  
 IC [5]  
 ICM: C07K003-22  
 ICS: C07K003-24; C07K003-28; C07K015-00  
 EXF 424/105; 530/380; 530/381; 530/412; 530/416; 530/417; 530/418; 530/419;  
 530/420; 530/421; 435/69.6  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 8 OF 34 USPATFULL on STN  
 AN 93:22826 USPATFULL  
 TI Cyclic hydrocarbons with an aminoalkyl sidechain  
 IN Johnson, Roy A., Kalamazoo, MI, United States  
 Bundy, Gordon L., Portage, MI, United States  
 Youngdale, Gilbert A., Portage, MI, United States  
 Morton, Douglas R., Portage, MI, United States  
 Wallach, deceased, Donald P., late of Richland, MI, United States by  
 Vera M. Wallach, legal representative  
 PA The Upjohn Company, Kalamazoo, MI, United States (U.S. corporation)  
 PI US 5196542 19930323 <--  
 AI US 1991-657721 19910220 (7)  
 RLI Division of Ser. No. US 1989-394396, filed on 15 Aug 1989 which is a  
 division of Ser. No. US 1987-117851, filed on 16 Jun 1987, now patented,  
 Pat. No. US 4917826 which is a continuation-in-part of Ser. No. US  
 1986-843120, filed on 24 Mar 1986, now abandoned which is a  
 continuation-in-part of Ser. No. US 1985-788995, filed on 18 Oct 1985,  
 now abandoned  
 DT Utility  
 FS Granted  
 LN.CNT 4544  
 INCL INCLM: 546/326.000  
 INCLS: 546/333.000; 564/460.000; 540/107.000; 514/357.000; 514/172.000  
 NCL NCLM: 546/326.000  
 NCLS: 540/107.000; 546/333.000; 564/460.000  
 IC [5]  
 ICM: C07D213-38  
 ICS: C07D313-50; A61K031-58; A61K031-44  
 EXF 546/329; 546/333; 364/460  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 9 OF 34 USPATFULL on STN  
 AN 93:22472 USPATFULL  
 TI Collagen-based wound dressing and method for applying same  
 IN Silver, Fred, Bangor, PA, United States  
 Sharma, Vinay, Long Valley, NJ, United States  
 Berndt, Dieter R., Allenwood, NJ, United States  
 Marn, Louis E., Morris Plains, NJ, United States  
 PA Micro-Collagen Pharmaceuticals, Ltd., Long Valley, NJ, United States (U.S.  
 corporation)  
 PI US 5196185 19930323 <--  
 AI US 1989-405520 19890911 (7)  
 DT Utility  
 FS Granted  
 LN.CNT 332  
 INCL INCLM: 424/045.000  
 INCLS: 514/801.000; 424/428.000  
 NCL NCLM: 424/045.000  
 NCLS: 424/428.000; 514/801.000  
 IC [5]  
 ICM: A61L009-04  
 EXF 241/184; 424/45; 424/499; 128/156; 604/368; 514/778; 514/734; 530/356  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 10 OF 34 USPATFULL on STN  
 AN 93:12656 USPATFULL  
 TI Cyclic hydrocarbons with an aminoalkyl sidechain  
 IN Johnson, Roy A., Kalamazoo, MI, United States  
 Bundy, Gordon L., Portage, MI, United States  
 Youngdale, Gilbert A., Portage, MI, United States  
 Morton, Douglas R., Portage, MI, United States  
 Wallach, deceased, Donald P., late of Portage, MI, United States

Wallach, Legal Representative, by Vera M., Richland, MI, United States  
PA The Upjohn Company, Kalamazoo, MI, United States (U.S. corporation)  
PI US 5187299 19930216 <--  
AI US 1991-793486 19911113 (7)  
RLI Continuation of Ser. No. US 1991-657729, filed on 20 Feb 1991, now  
abandoned which is a division of Ser. No. US 1989-394396, filed on 15  
Aug 1989, now abandoned which is a division of Ser. No. US 1987-117851,  
filed on 16 Jun 1987, now patented, Pat. No. US 4917826 which is a  
continuation-in-part of Ser. No. US 1986-843120, filed on 24 Mar 1986,  
now abandoned which is a continuation-in-part of Ser. No. US  
1985-788995, filed on 18 Oct 1985, now abandoned  
DT Utility  
FS Granted  
LN.CNT 4473  
INCL INCLM: 552/522.000  
INCLS: 552/554.000  
NCL NCLM: 552/522.000  
NCLS: 552/554.000  
IC [5]  
ICM: C07J041-00  
EXF 552/522; 552/554  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 11 OF 34 USPATFULL on STN  
AN 92:96931 USPATFULL  
TI Preparation of amine-enriched proteins having an increased isoelectric  
point  
IN Danielson, Susan J., Rochester, NY, United States  
Specht, Donald P., Rochester, NY, United States  
PA Eastman Kodak Company, Rochester, NY, United States (U.S. corporation)  
PI US 5162219 19921110 <--  
AI US 1990-540428 19900618 (7)  
DT Utility  
FS Granted  
LN.CNT 438  
INCL INCLM: 435/192.000  
INCLS: 435/128.000  
NCL NCLM: 435/192.000  
NCLS: 435/128.000  
IC [5]  
ICM: C12N009-08  
ICS: C12P013-00  
EXF 435/192; 435/128; 435/132  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 12 OF 34 USPATFULL on STN  
AN 92:84894 USPATFULL  
TI Complexes of nitric oxide with polyamines  
IN Keefer, Larry K., Bethesda, MD, United States  
Hrabie, Joseph A., Frederick, MD, United States  
PA The United States of America as represented by the Secretary of the  
Department of Health and Human Services, Washington, DC, United States  
(U.S. government)  
PI US 5155137 19921013 <--  
AI US 1990-585793 19900920 (7)  
DT Utility  
FS Granted  
LN.CNT 623  
INCL INCLM: 514/611.000  
INCLS: 514/255.000; 514/315.000; 514/357.000; 544/382.000; 546/244.000;  
546/332.000; 564/112.000; 564/113.000  
NCL NCLM: 514/611.000

NCLS: 514/255.010; 514/315.000; 514/357.000; 544/382.000; 546/244.000;  
546/332.000; 564/112.000; 564/113.000

IC [5]

ICM: A61K031-13

EXF 564/109; 564/107; 564/112; 564/113; 514/610; 514/611

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 13 OF 34 USPATFULL on STN

AN 92:74640 USPATFULL

TI Cyclic hydrocarbons with an aminoalkyl sidechain

IN Johnson, Roy A., Kalamazoo, MI, United States

Bundy, Gordon L., Portage, MI, United States

Youngdale, Gilbert A., Portage, MI, United States

Morton, Douglas R., Portage, MI, United States

Wallach, deceased, Donald P., late of Kalamazoo, MI, United States

Wallach, legal representative, by Vera M., Richland, MI, United States

PA The Upjohn Company, Kalamazoo, MI, United States (U.S. corporation)

PI US 5145874 19920908 <--

AI US 1991-663037 19910225 (7)

RLI Continuation of Ser. No. US 1989-394396, filed on 15 Aug 1989, now  
abandoned which is a division of Ser. No. US 1987-117851, filed on 16  
Jun 1987, now patented, Pat. No. US 4917826 which is a  
continuation-in-part of Ser. No. US 1986-843120, filed on 24 Mar 1986,  
now abandoned which is a continuation-in-part of Ser. No. US  
1985-788995, filed on 18 Oct 1985, now abandoned

DT Utility

FS Granted

LN.CNT 4780

INCL INCLM: 514/650.000

INCLS: 514/529.000; 514/532.000; 514/533.000; 514/534.000; 514/538.000;  
514/545.000; 514/579.000; 514/613.000; 514/616.000; 514/617.000;  
514/618.000; 514/619.000; 514/620.000; 514/621.000; 514/622.000;  
514/623.000; 514/642.000; 564/281.000; 564/337.000; 564/453.000;  
564/454.000; 564/455.000; 564/456.000; 564/461.000; 560/009.000;  
560/016.000; 560/037.000; 560/038.000; 560/039.000; 560/041.000;  
560/042.000; 560/051.000; 560/053.000; 560/056.000; 560/057.000;  
560/060.000; 560/061.000; 560/062.000; 560/063.000

NCL NCLM: 514/650.000

NCLS: 514/529.000; 514/532.000; 514/533.000; 514/534.000; 514/538.000;  
514/545.000; 514/579.000; 514/613.000; 514/616.000; 514/617.000;  
514/618.000; 514/619.000; 514/620.000; 514/621.000; 514/622.000;  
514/623.000; 514/642.000; 564/281.000; 564/337.000; 564/453.000;  
564/454.000; 564/455.000; 564/456.000; 564/461.000

IC [5]

ICM: A61K031-16

ICS: A61K031-165; A61K031-13; A61K031-135; C07C211-13; C07C211-21

EXF 564/281; 564/461; 564/337; 564/453; 564/454; 564/455; 564/456; 514/579;  
514/642; 514/650; 514/529; 514/532; 514/533; 514/534; 514/538; 514/545;  
514/613; 514/616; 514/617; 514/618; 514/619; 514/620; 514/621; 514/622;  
514/623; 560/9; 560/16; 560/37; 560/38; 560/39; 560/41; 560/42; 560/51;  
560/53; 560/56; 560/57; 560/60; 560/61; 560/62; 560/63

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 14 OF 34 USPATFULL on STN

AN 92:29682 USPATFULL

TI Iron complexes of hydroxypyridones useful for treating iron overload

IN Hider, Robert C., Clacton, England

Kontoghiorghes, George, London, England

Silver, Jack, London, England

Stockham, Michael A., Saffron Walden, England

PA National Research Development Corporation, London, England (U.S.  
corporation)

PI US 5104865 19920414 <--  
 AI US 1989-403054 19890901 (7)  
 RLI Continuation of Ser. No. US 1986-944355, filed on 22 Dec 1986, now  
 abandoned which is a division of Ser. No. US 1984-651684, filed on 18  
 Sep 1984, now patented, Pat. No. US 4666927  
 PRAI GB 1983-25494 19830923  
 DT Utility  
 FS Granted  
 LN.CNT 2029  
 INCL INCLM: 514/188.000  
 INCLS: 514/184.000  
 NCL NCLM: 514/188.000  
 NCLS: 514/184.000  
 IC [5]  
 ICM: A61K031-555  
 EXF 514/184; 514/188; 514/346; 514/350; 424/245; 424/256; 546/291; 546/292;  
 546/296; 546/300  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 15 OF 34 USPATFULL on STN  
 AN 92:11195 USPATFULL  
 TI Lipid-protein compositions and articles and methods for their  
 preparation  
 IN Ribl, Hans O., Atherton, CA, United States  
 PA Biocircuits Corporation, Burlingame, CA, United States (U.S.  
 corporation)  
 PI US 5087952 19920211 <--  
 AI US 1989-321962 19890310 (7)  
 RLI Division of Ser. No. US 1986-933034, filed on 20 Nov 1986, now patented,  
 Pat. No. US 4859538, issued on 22 Aug 1989  
 DT Utility  
 FS Granted  
 LN.CNT 926  
 INCL INCLM: 357/025.000  
 INCLS: 357/023.150  
 NCL NCLM: 257/253.000  
 NCLS: 257/414.000  
 IC [5]  
 ICM: H01L029-66  
 ICS: H01L029-96  
 EXF 357/23.15; 357/25; 357/8; 435/176; 435/177; 435/180; 435/181  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 16 OF 34 USPATFULL on STN  
 AN 92:9107 USPATFULL  
 TI Bis-naphthalimides as anticancer agents  
 IN Ardecky, Robert J., Landenberg, PA, United States  
 Patten, Arthur D., Bear, DE, United States  
 Sun, Jung-Hui, Hockessin, DE, United States  
 PA Du Pont Merck Pharmaceutical Company, Wilmington, DE, United States  
 (U.S. corporation)  
 PI US 5086059 19920204 <--  
 AI US 1990-539115 19900607 (7)  
 DT Utility  
 FS Granted  
 LN.CNT 660  
 INCL INCLM: 514/284.000  
 INCLS: 546/076.000; 546/077.000; 546/099.000  
 NCL NCLM: 514/284.000  
 NCLS: 546/076.000; 546/077.000; 546/078.000; 546/099.000  
 IC [5]  
 ICM: C07D221-18

ICS: A61K031-435

EXF 546/77; 546/99; 546/76; 514/284

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 17 OF 34 USPATFULL on STN

AN 92:5500 USPATFULL

TI Method for quantitative determination of polyamines

IN Okada, Masato, Yokohama, Japan  
Sakamoto, Makoto, Fujisawa, Japan

PA Tokuyama Soda Co., Ltd., Tokuyama, Japan (non-U.S. corporation)

PI US 5082770 19920121 <--

AI US 1988-176885 19880404 (7)

PRAI JP 1987-82206 19870404

JP 1987-95218 19870420

DT Utility

FS Granted

LN.CNT 937

INCL INCLM: 435/026.000

INCLS: 435/025.000; 435/018.000; 435/019.000; 435/189.000; 435/190.000;  
435/183.000; 435/859.000

NCL NCLM: 435/026.000

NCLS: 435/018.000; 435/019.000; 435/025.000; 435/183.000; 435/189.000;  
435/190.000; 435/859.000

IC [5]

ICM: C12Q001-32

ICS: C12Q001-26; C12N009-04

EXF 435/25; 435/26; 435/18; 435/19; 435/189; 435/190; 435/183; 435/803;  
435/814; 435/815; 435/859

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 18 OF 34 USPATFULL on STN

AN 91:50610 USPATFULL

TI Photochemical nucleic acid-labeling reagent having a polyalkylamine  
spacer

IN Dattagupta, Nanibhushan, New Haven, CT, United States

Albarella, James P., Elkhart, IN, United States

PA Molecular Diagnostics, Inc., West Haven, CT, United States (U.S.  
corporation)

PI US 5026840 19910625 <--

AI US 1990-475639 19900206 (7)

RLI Continuation of Ser. No. US 1987-27384, filed on 18 Mar 1987, now  
patented, Pat. No. US 4950744 which is a continuation-in-part of Ser.  
No. US 1985-690336, filed on 10 Jan 1985, now abandoned

DT Utility

FS Granted

LN.CNT 930

INCL INCLM: 536/027.000

INCLS: 435/004.000; 435/006.000; 435/188.000; 436/063.000; 436/094.000;  
436/501.000

NCL NCLM: 536/025.320

NCLS: 435/004.000; 435/006.000; 435/188.000; 436/063.000; 436/094.000;  
436/501.000

IC [5]

ICM: C07H015-12

ICS: C12Q001-00

EXF 536/27; 435/4; 435/6; 435/188; 436/63; 436/94; 436/501

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 19 OF 34 USPATFULL on STN

AN 91:44659 USPATFULL

TI Culture medium containing human albumin, process for the preparation of  
an injectable product from this medium, product obtained and its use,

and **composition** obtained  
 IN Drouet, Xavier, Paris, France  
 Goossens, Dominique, Paris, France  
 Rouger, Philippe, Chaville, France  
 PA Foundation Centre National de Transfusion Sanguine, Paris, France  
 (non-U.S. government)  
 PI US 5021349 19910604 <--  
 AI US 1987-61706 19870611 (7)  
 PRAI FR 1986-8494 19860612  
 DT Utility  
 FS Granted  
 LN.CNT 341  
 INCL INCLM: 435/240.310  
 INCLS: 435/240.200; 435/240.300  
 NCL NCLM: 435/407.000  
 IC [5]  
 ICM: C12N005-00  
 EXF 435/68; 435/1; 435/172.2; 435/240.27; 435/240.31; 435/240.2; 435/240.3;  
 530/387; 436/547; 436/548; 424/85; 935/107  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 20 OF 34 USPATFULL on STN  
 AN 90:50517 USPATFULL  
 TI Polycationic buffers and method for gel electrophoresis of nucleic acids  
 IN Mandecki, Wlodek, Vernon Hills, IL, United States  
 Hayden, Mark A., Vernon Hills, IL, United States  
 PA Abbott Laboratories, North Chicago, IL, United States (U.S. corporation)  
 PI US 4936963 19900626 <--  
 AI US 1989-356590 19890523 (7)  
 RLI Continuation of Ser. No. US 1987-54645, filed on 27 May 1987, now  
 abandoned  
 DT Utility  
 FS Granted  
 LN.CNT 397  
 INCL INCLM: 204/182.800  
 INCLS: 204/299.000R  
 NCL NCLM: 204/468.000  
 IC [5]  
 ICM: G01N027-26  
 EXF 204/182.8; 204/299R; 204/180.1  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 21 OF 34 USPATFULL on STN  
 AN 90:34059 USPATFULL  
 TI Nucleic acid capture method  
 IN Gebeyehu, Gulilat, Silver Spring, MD, United States  
 Klevan, Leonard, Derwood, MD, United States  
 Harding, John D., Potomac, MD, United States  
 PA Life Technologies, Inc., Gaithersburg, MD, United States (U.S.  
 corporation)  
 PI US 4921805 19900501 <--  
 AI US 1989-414728 19890929 (7)  
 RLI Continuation of Ser. No. US 1987-78991, filed on 29 Jul 1987, now  
 abandoned  
 DT Utility  
 FS Granted  
 LN.CNT 655  
 INCL INCLM: 435/270.000  
 INCLS: 435/006.000; 436/178.000; 436/501.000; 436/526.000; 935/019.000;  
 935/085.000  
 NCL NCLM: 435/270.000  
 NCLS: 435/006.000; 436/178.000; 436/501.000; 436/526.000

IC [5]  
 ICM: C12N001-08  
 EXF 436/94; 436/178; 436/501; 436/526; 435/6; 435/270; 435/803; 935/19;  
 935/85; 210/635; 210/656  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 22 OF 34 USPATFULL on STN  
 AN 90:29778 USPATFULL  
 TI Cyclic hydrocarbons with an aminoalkyl sidechain  
 IN Johnson, Roy A., Kalamazoo, MI, United States  
 Bundy, Gordon L., Portage, MI, United States  
 Youngdale, Gilbert A., Portage, MI, United States  
 Morton, Douglas R., Portage, MI, United States  
 Wallach, deceased, Donald P., late of Kalamazoo, MI, United States by  
 Vera M. Wallach, legal representative  
 PA The Upjohn Company, Kalamazoo, MI, United States (U.S. corporation)  
 PI US 4917826 19900417 <--  
 WO 8702367 19870423 <--  
 AI US 1987-117851 19870616 (7)  
 WO 1986-US2116 19861007  
 19870616 PCT 371 date  
 19870616 PCT 102(e) date

DT Utility  
 FS Granted  
 LN.CNT 4514  
 INCL INCLM: 552/522.000  
 INCLS: 514/169.000; 514/182.000; 514/237.800; 514/255.000; 514/351.000;  
 514/352.000; 514/381.000; 514/398.000; 514/399.000; 514/400.000;  
 514/424.000; 514/426.000; 514/471.000; 514/472.000; 514/866.000;  
 544/154.000; 544/380.000; 546/300.000; 546/304.000; 546/307.000;  
 546/312.000; 548/263.000; 548/337.000; 548/341.000; 548/342.000;  
 548/528.000; 549/480.000; 549/491.000; 549/492.000; 552/521.000  
 NCL NCLM: 552/522.000  
 NCLS: 514/169.000; 514/182.000; 514/237.800; 514/253.020; 514/351.000;  
 514/352.000; 514/381.000; 514/398.000; 514/399.000; 514/400.000;  
 514/424.000; 514/426.000; 514/471.000; 514/472.000; 514/866.000;  
 544/154.000; 544/380.000; 546/300.000; 546/304.000; 546/307.000;  
 546/312.000

IC [4]  
 ICM: C07J009-00  
 ICS: C07D265-30; C07D295-00; C07D213-62; C07D213-78; A61K031-13;  
 A61K031-395; A61K031-495  
 EXF 514/169; 514/182; 260/397; 260/397.1; 260/397.5  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 23 OF 34 USPATFULL on STN  
 AN 90:23618 USPATFULL  
 TI Pharmaceutical compositions  
 IN Hider, Robert C., Clacton, England  
 Kontoghiorghes, George, London, England  
 Silver, Jack, London, England  
 Stockham, Michael A., Saffron Walden, England  
 PA National Research Development Corporation, London, England (non-U.S.  
 corporation)  
 PI US 4912118 19900327 <--  
 AI US 1986-944872 19861222 (6)  
 RLI Division of Ser. No. US 1984-651684, filed on 18 Sep 1984, now patented,  
 Pat. No. US 4666927  
 PRAI GB 1983-25494 19830923  
 DT Utility  
 FS Granted  
 LN.CNT 1927

INCL INCLM: 514/332.000  
INCLS: 514/334.000  
NCL NCLM: 514/332.000  
NCLS: 514/334.000  
IC [4]  
ICM: C07D401-12  
ICS: C07D401-14  
EXF 514/332; 514/334; 514/348; 514/350; 514/352; 424/10; 424/147  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 24 OF 34 USPATFULL on STN  
AN 89:69636 USPATFULL  
TI Novel lipid-protein compositions and articles and methods for their preparation  
IN Ribl, Hans O., 33 Emily La., Atherton, CA, United States 94025  
PI US 4859538 19890822 <--  
AI US 1986-933034 19861120 (6)  
DT Utility  
FS Granted  
LN.CNT 977  
INCL INCLM: 428/474.400  
INCLS: 427/002.000; 435/004.000  
NCL NCLM: 428/474.400  
NCLS: 340/815.400; 422/069.000; 427/002.130; 435/004.000; 438/001.000  
IC [4]  
ICM: B32B027-00  
EXF 118/402; 427/2; 427/402; 428/408; 428/474.4; 435/4; 422/69  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 25 OF 34 USPATFULL on STN  
AN 89:34520 USPATFULL  
TI S-alkylated coenzyme A with effect on polyamine acetylase  
IN Pegg, Anthony E., Hummelstown, PA, United States  
Erwin, Bradley G., Hershey, PA, United States  
PA Research Corporation, New York, NY, United States (U.S. corporation)  
PI US 4826968 19890502 <--  
AI US 1985-727508 19850426 (6)  
DT Utility  
FS Granted  
LN.CNT 496  
INCL INCLM: 536/027.000  
INCLS: 536/026.000; 536/028.000; 536/029.000; 530/331.000; 544/247.000  
NCL NCLM: 536/026.230  
NCLS: 530/331.000; 544/247.000  
IC [4]  
ICM: C07H019-167  
ICS: C07H019-207  
EXF 536/25; 536/22  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 26 OF 34 USPATFULL on STN  
AN 89:9378 USPATFULL  
TI S-modified adenosyl-1,8-diamino-3-thiooctane derivatives  
IN Anton, David L., Wilmington, DE, United States  
Korant, Bruce D., Wilmington, DE, United States  
Wang, Chia-Lin J., Wilmington, DE, United States  
PA E. I. Du Pont de Nemours and Company, Wilmington, DE, United States  
(U.S. corporation)  
PI US 4803272 19890207 <--  
AI US 1987-17889 19870224 (7)  
DT Utility  
FS Granted

LN.CNT 578  
INCL INCLM: 544/277.000  
INCLS: 514/261.000; 514/266.000  
NCL NCLM: 544/277.000  
NCLS: 514/263.400; 544/264.000  
IC [4]  
ICM: A61K031-52  
ICS: C07D473-34  
EXF 544/262; 544/277; 514/261; 514/266  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 27 OF 34 USPATFULL on STN  
AN 88:83860 USPATFULL  
TI Detection of nucleic acid hybrids by prolonged chemiluminescence  
IN Dattagupta, Nanibhushan, New Haven, CT, United States  
Clemens, Anton H., Elkhart, IN, United States  
PA Molecular Diagnostics, Inc., West Haven, CT, United States (U.S.  
corporation)  
PI US 4794073 19881227 <--  
AI US 1985-753734 19850710 (6)  
DT Utility  
FS Granted  
LN.CNT 1496  
INCL INCLM: 435/006.000  
INCLS: 435/028.000; 536/027.000; 252/700.000  
NCL NCLM: 435/006.000  
NCLS: 252/700.000; 435/028.000; 536/024.300; 536/025.320; 544/237.000  
IC [4]  
ICM: C12Q001-68  
ICS: C07H021-00  
EXF 435/6; 435/28; 536/27; 252/700  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 28 OF 34 USPATFULL on STN  
AN 87:36107 USPATFULL  
TI Pharmaceutical compositions of hydroxypyridones  
IN Hider, Robert C., Clacton, United Kingdom  
Kontoghiorghe, George, London, United Kingdom  
Silver, Jack, London, United Kingdom  
Stockham, Michael A., Walden, United Kingdom  
PA National Research Development Corporation, London, England (non-U.S.  
corporation)  
PI US 4666927 19870519 <--  
AI US 1984-651684 19840918 (6)  
PRAI GB 1983-25494 19830923  
DT Utility  
FS Granted  
LN.CNT 1680  
INCL INCLM: 514/350.000  
INCLS: 514/346.000; 546/291.000; 546/292.000; 546/296.000; 546/300.000  
NCL NCLM: 514/350.000  
NCLS: 514/346.000; 546/291.000; 546/292.000; 546/296.000; 546/300.000  
IC [4]  
ICM: A61K031-495  
ICS: C07D239-02  
EXF 546/291; 546/292; 546/296; 546/300; 424/245; 424/256; 514/346; 514/350  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 29 OF 34 USPATFULL on STN  
AN 86:31285 USPATFULL  
TI Method and ingestible formulation for inhibiting the secretion of  
stomach acid

IN Ray, Tushar K., Dewitt, NY, United States  
PA Research Foundation of State University of New York, Albany, NY, United States (U.S. corporation)  
PI US 4591605 19860527 <--  
AI US 1982-437847 19821029 (6)  
RLI Continuation-in-part of Ser. No. US 1981-319929, filed on 10 Nov 1981, now abandoned  
DT Utility  
FS Granted  
LN.CNT 400  
INCL INCLM: 514/579.000  
NCL NCLM: 514/579.000  
IC [4]  
ICM: A61K031-13  
EXF 424/325; 514/579  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 30 OF 34 USPATFULL on STN  
AN 85:17810 USPATFULL  
TI Epithelial cell growth regulating **composition** containing polyamines and a method of using same  
IN Raisfeld, Ilene H., Setauket, NY, United States  
PA The Research Foundation of State University of New York, Albany, NY, United States (U.S. corporation)  
PI US 4507321 19850326 <--  
AI US 1982-349598 19820217 (6)  
DT Utility  
FS Granted  
LN.CNT 573  
INCL INCLM: 514/673.000  
INCLS: 424/326.000; 514/674.000; 514/927.000  
NCL NCLM: 514/673.000  
NCLS: 514/674.000; 514/927.000  
IC [3]  
ICM: A61K031-13  
ICS: A61K031-155  
EXF 424/325; 424/326  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 31 OF 34 USPATFULL on STN  
AN 85:4845 USPATFULL  
TI Direct-positive silver halide photographic material  
IN Yoshida, Kazuhiro, Hino, Japan  
PA Konishiroku Photo Industry Co., Ltd., Tokyo, Japan (non-U.S. corporation)  
PI US 4495274 19850122 <--  
AI US 1983-487216 19830421 (6)  
PRAI JP 1982-68785 19820426  
DT Utility  
FS Granted  
LN.CNT 607  
INCL INCLM: 430/523.000  
INCLS: 430/597.000; 430/596.000; 430/605.000; 430/608.000; 430/606.000; 430/599.000; 430/607.000; 430/614.000; 430/611.000; 430/940.000  
NCL NCLM: 430/523.000  
NCLS: 430/596.000; 430/597.000; 430/599.000; 430/605.000; 430/606.000; 430/607.000; 430/608.000; 430/611.000; 430/614.000; 430/940.000  
IC [3]  
ICM: G03C001-36  
EXF 430/940; 430/596; 430/597; 430/605; 430/606; 430/608; 430/599; 430/611; 430/614; 430/607; 430/523  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 32 OF 34 USPATFULL on STN  
 AN 84:55345 USPATFULL  
 TI Radiosensitizing nitrobenzoic acid amide derivatives  
 IN Fujita, Eiichi, Kyoto, Japan  
 Nagao, Yoshimitsu, Uji, Japan  
 Mori, Tomoyuki, Yokohama, Japan  
 Murayama, Chieko, Zama, Japan  
 Asao, Tetsuji, Tokushima, Japan  
 PA Taiho Pharmaceutical Company Limited, Tokyo, Japan (non-U.S. corporation)  
 PI US 4474814 19841002 <--  
 AI US 1982-444339 19821123 (6)  
 PRAI JP 1981-191228 19811126  
 DT Utility  
 FS Granted  
 LN.CNT 499  
 INCL INCLM: 424/324.000  
 INCLS: 564/139.000; 564/157.000  
 NCL NCLM: 514/616.000  
 NCLS: 564/139.000; 564/157.000  
 IC [3]  
 ICM: C07C103-82  
 ICS: C07C103-87; A61K031-165  
 EXF 564/139; 564/157; 424/324  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 33 OF 34 USPATFULL on STN  
 AN 76:47911 USPATFULL  
 TI Fermentation of cephamycin C  
 IN Inamine, Edward, Rahway, NJ, United States  
 Birnbaum, Jerome, Morganville, NJ, United States  
 PA Merck & Co., Inc., Rahway, NJ, United States (U.S. corporation)  
 PI US 3977942 19760831 <--  
 AI US 1975-634106 19751121 (5)  
 DT Utility  
 FS Granted  
 LN.CNT 672  
 INCL INCLM: 195/080.000R  
 INCLS: 195/036.000C  
 NCL NCLM: 435/048.000  
 NCLS: 435/032.000; 435/244.000; 435/886.000  
 IC [2]  
 ICM: C12D009-00  
 EXF 195/36C; 195/80R; 195/29  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 34 OF 34 USPATFULL on STN  
 AN 72:45322 USPATFULL  
 TI ANTIMUTAGENIC TREATMENT OF BACTERIA  
 IN Sevag, Manasseh G., Newtown Square, PA, United States  
 PA The Trustees of the University of Pennsylvania, United States  
 PI US 3689646 19720905 <--  
 AI US 1969-871019 19690904 (4)  
 RLI Division of Ser. No. US 1969-576566, filed on 1 Sep 1969, now abandoned  
 which is a continuation-in-part of Ser. No. US 1963-297200, filed on 24  
 Jul 1963, now abandoned And a continuation-in-part of Ser. No. US  
 1964-355480, filed on 27 Mar 1964, now abandoned  
 DT Utility  
 FS Granted  
 LN.CNT 668  
 INCL INCLM: 424/181.000

INCLS: 424/227.000; 424/228.000; 424/229.000; 424/257.000  
NCL NCLM: 514/027.000  
NCLS: 514/029.000; 514/037.000; 514/152.000; 514/217.000; 514/226.200;  
514/297.000; 514/370.000; 514/628.000; 514/654.000; 514/673.000  
IC [1]  
ICM: A61K021-00  
ICS: A61K027-00  
EXF 424/257; 424/229; 424/228; 424/227; 424/181  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 14 1-4,30-34 kwic

L4 ANSWER 1 OF 34 USPATFULL on STN  
PI US 5599791 19970204  
WO 9212172 19920723 <--  
DETD . . . 28.degree.-30.degree. C. and then used to inoculate 500 ml  
flasks containing 100 ml of a seed media of the following  
**composition:**  
CLM What is claimed is:  
13. A pharmaceutical **composition** containing a compound of  
claim 1 as the active ingredient in admixture with a pharmaceutically  
acceptable carrier.

IT 124-20-9, Spermidine 1119-28-4, 3-Aminopropionitrile fumarate  
(tert-butoxycarbonylation of)

L4 ANSWER 2 OF 34 USPATFULL on STN  
PI US 5274089 19931228 <--  
SUMM The substrate is phosphatidyl choline. The material has a fatty acid  
**composition** upon saponification, of 2% of 16:0, 1% of 18:0, 3%  
of 18:1, 18% of 18:2, and 12% of 18:3 fatty. . .  
IT 50-28-2, reactions 51-67-2, Tyramine 53-16-7, Estrone, reactions  
53-41-8 53-43-0, 3.beta.-Hydroxy-5-androsten-17-one 53-45-2,  
Estra-1,3,5(10)-trien-17-one 64-04-0, Phenethylamine 64-18-6,  
reactions 71-44-3, Spermine 75-07-0, reactions 79-04-9 81-25-4  
89-97-4, 2-Chlorobenzylamine 90-42-6, 2-Cyclohexyl cyclohexanone  
91-00-9, Aminodiphenylmethane 92-68-2, 4-Cyclohexylcyclohexanone  
95-00-1, 2,4-Dichlorobenzylamine 96-32-2, Methyl bromoacetate  
100-46-9, reactions 100-52-7, reactions 102-49-8,  
3,4-Dichlorobenzylamine 104-53-0, Hydrocinnamaldehyde 104-86-9,  
4-Chlorobenzylamine 104-88-1, 4-Chlorobenzaldehyde, reactions  
105-39-5, Ethyl chloroacetate 107-13-1, reactions 107-85-7,  
Isoamylamine 108-00-9, unsym-Dimethyl-ethylenediamine 108-31-6,  
reactions 108-94-1, reactions 109-01-3, N-Methylpiperazine  
109-55-7, 3-Dimethylaminopropylamine 109-64-8, 1,3-Dibromopropane  
109-76-2, 1,3-Propanediamine 110-13-4, 2,5-Hexanedione 110-60-1,  
1,4-Diaminobutane 111-40-0 123-00-2, 3-Morpholinopropylamine  
123-38-6, reactions 124-09-4, reactions 124-13-0, Octylaldehyde  
124-20-9, Spermidine 124-25-4, Tetradecyl aldehyde 138-14-7  
140-75-0, 4-Fluorobenzylamine 140-80-7, 2-Amino-5-diethylaminopentane  
156-87-6 327-92-4, 1,5-Difluoro-2,4-dinitrobenzene 333-93-7,  
1,4-Diaminobutane dihydrochloride 373-44-4, 1,8-Octanediamine  
462-94-2, 1,5-Diaminopentane 502-72-7, Cyclopentadecanone 506-59-2,  
Dimethylamine hydrochloride 566-88-1, 5.alpha.-Cholestan-3-one  
590-86-3, Isovaleraldehyde 593-51-1, Methylamine hydrochloride  
598-21-0, Bromoacetyl bromide 617-89-0, 2-Aminomethyl-furan 646-25-3,  
1,10-Decanediamine 700-58-3, 2-Adamantanone 766-39-2,  
2,3-Dimethylmaleic anhydride 814-68-6, Acryloyl chloride 830-13-7,  
Cyclododecanone 929-06-6, 2-(2-Aminoethoxy)ethanol 963-74-6,  
5.alpha.-Androstan-17-one 1035-77-4, Estradiol 3-methyl ether  
1624-62-0, Estrone methyl ether 1755-52-8 2038-03-1,

2-Morpholinoethylamine 2393-23-9, 4-Methoxybenzylamine 2524-64-3,  
 Diphenyl chlorophosphate 2706-56-1, 2-(2-Aminoethyl)pyridine  
 2740-83-2, 3-(Trifluoromethyl)benzylamine 3029-19-4,  
 1-Pyrenecarboxaldehyde 3048-01-9 3179-63-3 3300-51-4,  
 4-(Trifluoromethyl)benzylamine 3731-51-9, 2-(Aminomethyl)pyridine  
 3731-52-0, 3-(Aminomethyl)pyridine 3731-53-1, 4-(Aminomethyl)pyridine  
 4048-33-3, 6-Amino-1-hexanol 4097-89-6, Tris-(2-aminoethyl)amine  
 4894-75-1 5036-48-6 5104-49-4, Flurbiprofen 5538-95-4,  
 N-Dodecyl-1,3-propanediamine 5625-80-9 5680-79-5, Glycine methyl  
 ester hydrochloride 5993-91-9 6211-16-1 6384-10-7, Ornithine methyl  
 ester 6711-48-4 7149-10-2 7152-51-4 7209-38-3,  
 1,4-Bis(3-aminopropyl)piperazine 7663-77-6, 1-(3-Aminopropyl)-2-  
 pyrrolidinone 10025-87-3 10517-44-9 13258-63-4,  
 4-(2-Aminoethyl)pyridine 14210-25-4 19475-35-5 21370-71-8,  
 trans-1-Decalone 27757-85-3, 2-Thiophenemethylamine 28143-91-1  
 29602-39-9 30525-89-4, Paraformaldehyde 31239-17-5,  
 5.alpha.-Androstan-17.beta.-amine 34015-48-0, Lysine methyl ester  
 dihydrochloride 35303-76-5, 4-(2-Aminoethyl)benzenesulfonamide  
 40226-15-1 42014-51-7 49783-80-4 55757-60-3 56183-69-8, Diethyl  
 phosphorohydrazidate 69225-59-8 75659-75-5 83732-75-6,  
 2-(2-Aminoethyl)-1-methylpyrrole 85666-15-5 112663-37-3 112663-43-1  
 (reaction of, in synthesis of phospholipase A2-inhibiting amino  
 steroids and analogs)

L4 ANSWER 3 OF 34 USPATFULL on STN

PI US 5268293 19931207 <--

DETD . . . (as mono-hydrochloride salt) accumulated in the culture broth  
 is analyzed by the acidic ninhydrin method or HPLC, and amino acid  
**composition** in the culture broth is analyzed with an amino acid  
 autoanalyzer.

DETD . . . cultivated in a 30-L Jar fermentor at 32.degree. C., pH  
 6.8.about.7.0 under 0.5.about.1.0 vvm of aeration rate. The amino acid  
**composition** of culture broth was analyzed with an amino acid  
 autoanalyzer as shown in Table I. To investigate the effects of. . .

DETD TABLE I

+ Amino acid **composition** in the culture broth of

Corynebacterium glutamicum YJ-150

Amino Acid g/l Amino Acid g/l

L-Lysine .multidot. HCl

90.5 Glutamic acid  
 trace

Alanine 1.2 Leucine. . .

DETD . . . fermentor with Corynebacterium glutamicum CS-755 and YJ-150  
 (parent strain of CS-755). The amount of L-lysine produced and the amino  
 acid **composition** in the resultant culture broth are shown in  
 Table VI and Table VII, respectively.

DETD TABLE VII

Amino acid **composition** in the culture broth of

Corynebacterium glutamicum CS-755

| Amount<br>produced | Amount<br>produced |
|--------------------|--------------------|
| Amino Acid (g/l)   | Amino Acid (g/l)   |

L-Lysine .multidot. HCl

120 Glutamic. . .

IT 71-44-3, Spermine 74-79-3D, Arginine, analogs 110-60-1, Putrescine  
 124-20-9, Spermidine 461-89-2, 6-Azauracil 462-94-2,  
 Cadaverine 543-38-4, Canavanine 957-77-7, 5-Hydroxyuridine  
 1596-65-2 2280-42-4, .alpha.-Amino-.beta.-hydroxyvaleric acid

2936-69-8, S-(.beta.-Aminoethyl)-L-cysteine 5699-67-2, Arginine  
hydroxamate 7431-89-2 7730-20-3, 6-Fluorotryptophan  
(Corynebacterium glutamicum mutant resistant to, lysine manuf. with)

L4 ANSWER 4 OF 34 USPATFULL on STN

PI US 5260205 19931109

<--

DETD . . . step of applying a tobacco plant extract to an anion exchange medium, wherein the application temperature and the pH and **composition** of the extract are such that PMT is retained by the anion exchange medium. The PMT is then eluted from. . . with an elution buffer comprising an effective amount of a polyamine, wherein the elution temperature and the pH and chemical **composition** of the elution buffer are such that but for the polyamine, the PMT would be retained by the anion exchange. . .

DETD . . . however, the tobacco plant extract applied to the column (e.g., preferably, the phenylagarose eluate) must have a pH and chemical **composition** such that the PMT in the extract will bind to the anion exchange medium. That is, the extract should have. . .

DETD . . . hours. Preferably, the dialysis buffer will be stirred. A dialysis membrane having a 10,000 kD cut-off is preferred. The chemical **composition** and pH of the dialysis buffer is chosen so that PMT in the dialyzed fraction will be retained by the. . .

DETD . . . to be applied to the anion exchange medium, the anion exchange medium equilibration buffer must have a pH and chemical **composition** such that PMT is retained by the medium. Similarly, the skilled worker easily may determine suitable pH/chemical **composition** combinations. The preferred equilibration buffer contains essentially no added salt and has a pH of between about 7.2 to 8.3,. . .

DETD . . . with an elution buffer comprising an effective amount of a polyamine, wherein the elution temperature and the pH and chemical **composition** of the elution buffer are such that but for the polyamine, the PMT would be retained by the anion exchange. . .

DETD **Composition** of Buffer Solutions

CLM What is claimed is:

. . . (1) applying the extract to a solid phase anion exchange medium, wherein the application temperature and the pH and chemical **composition** of the extract are such that putrescine N-methyltransferase is retained by the anion exchange medium; (2) selectively eluting the putrescine. . . consisting of putrescine, N-methylputrescine, spermine, spermidine, agmatine, cadaverine, and mixtures thereof, wherein the elution temperature and the pH and chemical **composition** of the elution buffer are such that the putrescine N-methyltransferase would be retained by the anion exchange medium if the. . .

IT 71-44-3, Spermine 124-20-9, Spermidine 306-60-5, Agmatine 462-94-2, Cadaverine 14475-60-6, N-Methylputrescine  
(as eluant in purifn. tobacco root putrescine methyltransferase by anion-exchange chromatog.)

L4 ANSWER 30 OF 34 USPATFULL on STN

TI Epithelial cell growth regulating **composition** containing polyamines and a method of using same

PI US 4507321 19850326

<--

SUMM The present invention relates to **composition** containing polyamines which act as epithelial cell growth regulators, i.e. stimulants and inhibitors. Many of these compounds have been found. . .

SUMM The compounds useful in the **composition** and methods of the present invention are known in the chemical art. Details of the synthetic preparation of many of. . .

SUMM Specific compounds utilizable in the **composition** and methods

of the present invention are the following: (a reference indicated in [ ] immediately following each compound is. . .

SUMM The epithelial cell regulating activity of the compounds utilizable in the **composition** method of the present invention may be determined by measurement of the effect of the test compound in a screening. . . .

SUMM . . . (inhibitory amount). In the usual course of therapy, the active compound is incorporated into an acceptable vehicle to form a **composition** for topical administration to the affected area or into a form suitable for oral or parenteral administration, such as tablets, . . . .

SUMM . . . be based upon standard carriers such as pharmaceutically acceptable vegetable oils and gelatins, gums and petrolatum. Other ingredients to the **composition** of the present invention may be preservatives, coloring, flavoring, sweetening, thickening, suspending, disbursing, emulsifying, swelling, stabilizing and buffering agent as. . . .

SUMM Where the **composition** of the present invention is used to treat ischemic, decubitus, or peptic ulcers a combination of topical and systemic therapy. . . .

DETD . . . accordance with the above procedure, but where in place of spermidine, there is utilized spermine, or agmatine sulfate, a similar **composition** is obtained.

DETD By utilizing spermine, putrescine or agmatine sulfate in place of spermidine, a similarly useful **composition** is obtained.

IT 71-44-3 110-60-1 **124-20-9** 306-60-5  
(pharmaceutical compn. contg., for epithelium growth regulation)

L4 ANSWER 31 OF 34 USPATFULL on STN

PI US 4495274 19850122 <--

SUMM . . . the present invention is changeable over a wide range. The fogging degree is related not only to the silver halide **composition**, the particle size, etc., of the silver halide emulsion used but also to the kind and concentration of the fogging. . . .

IT 71-44-3 94-52-0 111-40-0 112-24-3 112-57-2 **124-20-9**  
4067-16-7 4403-32-1 4605-14-5 5401-94-5 7597-18-4 33568-98-8  
62572-78-5  
(photog. low speed direct-pos. emulsion contg.)

L4 ANSWER 32 OF 34 USPATFULL on STN

PI US 4474814 19841002 <--

DETD Given below are examples of pharmacological **composition** according to the invention.

CLM What is claimed is:  
6. A radiosensitizer **composition** comprising a radiosensitizing amount of a compound of claim 1 and a pharmaceutically acceptable carrier therefor.

IT 71-44-3 **124-20-9**  
(N-nitrobenzoylation of)

L4 ANSWER 33 OF 34 USPATFULL on STN

PI US 3977942 19760831 <--

DETD The basal production medium has the following **composition**:

DETD The basal production medium has the following **composition**:

DETD The basal production medium has the following **composition**:

DETD The basal production medium has the following **composition**:

DETD The basal production medium has the following **composition**:

IT 70-54-2 71-44-3 109-76-2 110-60-1 **124-20-9** 157-06-2  
306-60-5 348-66-3 462-94-2 616-07-9 616-29-5 923-27-3  
6291-84-5 7200-25-1

(cephamycin C fermn. stimulation by)

L4 ANSWER 34 OF 34 USPATFULL on STN

PI US 3689646 19720905

<--

SUMM Accordingly it is an object of this invention to provide a **composition** and method for controlling bacteria wherein the emergence of such drug-resistant strains is prevented. Other objects and advantages of this. . .

CLM What is claimed is:

2. A **composition** for killing bacteria by physical contact therewith consisting essentially of (1) an effective amount of a bactericidal component selected from. . .
3. A **composition** for killing bacteria by physical contact, comprising a sterile aqueous solution of about 10- 100 micrograms per milliliter of streptomycin. . .
4. A **composition** for killing bacteria by physical contact, comprising a sterile aqueous solution of about 0.01- 1.0 unit of penicillin per milliliter. . .
5. A **composition** for killing bacteria by physical contact comprising a sterile aqueous solution of about 0.1- 10 micrograms per milliliter of novobiocin. . .
6. A **composition** for killing bacteria by physical contact comprising a sterile aqueous solution of about 0.1-10.0 micrograms per milliliter of erythromycin and. . .
7. A **composition** for killing bacteria by physical contact comprising a sterile aqueous solution of about 0.1- 10.0 micrograms per milliliter of tetracycline. . .
8. A **composition** for killing bacteria by physical contact comprising a sterile aqueous solution of about 0.1- 10 micrograms per milliliter of chloramphenicol. . .
9. A **composition** for killing bacteria by physical contact comprising a sterile aqueous solution of about 0.1- 100 micrograms per milliliter of sulfathiazole. . .

IT 50-48-6 50-49-7 50-53-3, biological studies 58-28-6 60-87-7

60-99-1 69-05-6 71-44-3 83-89-6 124-20-9 303-53-7

438-60-8 3589-31-9

(antimutagenic agent, in bactericides)

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LOGINID:sssptaul25txc

PASSWORD:

\* \* \* \* \* RECONNECTED TO STN INTERNATIONAL \* \* \* \* \*  
SESSION RESUMED IN FILE 'USPATFULL' AT 12:31:09 ON 23 SEP 2003  
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COST IN U.S. DOLLARS

|                     | SINCE FILE | TOTAL   |
|---------------------|------------|---------|
|                     | ENTRY      | SESSION |
| FULL ESTIMATED COST | 35.00      | 42.71   |

=> file registry

|                      | SINCE FILE | TOTAL   |
|----------------------|------------|---------|
|                      | ENTRY      | SESSION |
| COST IN U.S. DOLLARS |            |         |
| FULL ESTIMATED COST  | 35.00      | 42.71   |

FILE 'REGISTRY' ENTERED AT 12:31:20 ON 23 SEP 2003  
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STRUCTURE FILE UPDATES: 22 SEP 2003 HIGHEST RN 591204-55-6  
DICTIONARY FILE UPDATES: 22 SEP 2003 HIGHEST RN 591204-55-6

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP  
PROPERTIES for more information. See STNote 27, Searching Properties  
in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> s putrescine/cn

L5 1 PUTRESCINE/CN

=> d 15

L5 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 110-60-1 REGISTRY  
CN 1,4-Butanediamine (8CI, 9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Tetramethylenediamine (7CI)  
OTHER NAMES:  
CN .alpha.,.omega.-Butanediamine  
CN 1,4-Butylenediamine  
CN 1,4-Diamino-n-butane  
CN 1,4-Diaminobutane  
CN 1,4-Tetramethylenediamine  
CN NSC 60545  
CN Putrescin  
CN **Putrescine**

FS 3D CONCORD  
MF C4 H12 N2  
CI COM  
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS,  
BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN,  
CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DETHERM\*,  
DRUGNL, DRUGPAT, DRUGU, DRUGUPDATES, EMBASE, GMELIN\*, HODOC\*, IFICDB,  
IFIPAT, IFIUDB, IPA, MEDLINE, MRCK\*, MSDS-OHS, NAPRALERT, NIOSHTIC,  
PIRA, PROMT, RTECS\*, SPECINFO, SYNTHLINE, TOXCENTER, USPAT2, USPATFULL  
(\*File contains numerically searchable property data)  
Other Sources: EINECS\*\*, NDSL\*\*, TSCA\*\*  
(\*Enter CHEMLIST File for up-to-date regulatory information)

H<sub>2</sub>N-(CH<sub>2</sub>)<sub>4</sub>-NH<sub>2</sub>

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

10849 REFERENCES IN FILE CA (1907 TO DATE)  
430 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
10871 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> s norspermikine/cn  
L6 0 NORSPERMIKINE/CN

=> s norspermidine/cn  
L7 1 NORSPERMIDINE/CN

=> d 17

L7 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 56-18-8 REGISTRY  
CN 1,3-Propanediamine, N-(3-aminopropyl)- (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Dipropylamine, 3,3'-diamino- (6CI, 8CI)  
OTHER NAMES:  
CN 1,5,9-Triazanonane  
CN 1,7-Diamino-4-azaheptane  
CN 1-Propanamine, 3,3'-iminobis-  
CN 3,3'-Diaminodipropylamine  
CN 3,3'-Iminobis(propylamine)  
CN 3,3'-Iminodi(propylamine)  
CN 4-Aza-1,7-diaminoheptane  
CN 4-Azaheptamethylenediamine  
CN 4-Azaheptane-1,7-diamine  
CN Bis(3-aminopropyl)amine  
CN Caldine  
CN Di(3-aminopropyl)amine  
CN Dipropylenetriamine  
CN N-(3-Aminopropyl)-1,3-propanediamine  
CN N-3-Aminopropyl-1,3-diaminopropane  
CN **Norspermidine**  
CN NSC 7773  
CN P 2 (hardener)  
CN sym-Norspermidine  
FS 3D CONCORD  
MF C6 H17 N3  
CI COM

LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS,  
BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CHEMCATS,  
CHEMINFORMRX, CHEMLIST, CIN, CSCHM, DDFU, DETHERM\*, DRUGU, EMBASE,  
GMELIN\*, HODOC\*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MSDS-OHS, NAPRALERT,  
NIOSTIC, PHAR, PROMT, RTECS\*, SPECINFO, SYNTHLINE, TOXCENTER, TULSA,  
USPAT2, USPATFULL  
(\*File contains numerically searchable property data)  
Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*  
(\*Enter CHEMLIST File for up-to-date regulatory information)

H<sub>2</sub>N-(CH<sub>2</sub>)<sub>3</sub>-NH-(CH<sub>2</sub>)<sub>3</sub>-NH<sub>2</sub>

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1346 REFERENCES IN FILE CA (1907 TO DATE)  
281 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
1346 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
48 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> s spermine/cn  
L8 1 SPERMINE/CN

=> d 18

L8 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 71-44-3 REGISTRY  
CN 1,4-Butanediamine, N,N'-bis(3-aminopropyl)- (8CI, 9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN **Spermine (6CI)**  
OTHER NAMES:  
CN 1,5,10,14-Tetraazatetradecane  
CN 4,9-Diazadodecane-1,12-diamine  
CN Gerontine  
CN Musculamine  
CN N,N'-Bis(3-aminopropyl)-1,4-butanediamine  
CN N,N'-Bis(3-aminopropyl)-1,4-tetramethylenediamine  
CN Neuridine  
CN NSC 268508  
CN Spermin  
FS 3D CONCORD  
DR 115-04-8  
MF C10 H26 N4  
CI COM  
LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN\*,  
BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS,  
CASREACT, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHM, CSNB,  
DDFU, DETHERM\*, DRUGU, EMBASE, GMELIN\*, HODOC\*, IFICDB, IFIPAT, IFIUDB,  
IPA, MEDLINE, MRCK\*, MSDS-OHS, NAPRALERT, NIOSTIC, PIRA, PROMT, RTECS\*,  
SPECINFO, SYNTHLINE, TOXCENTER, USPAT2, USPATFULL, VETU  
(\*File contains numerically searchable property data)  
Other Sources: EINECS\*\*, NDSL\*\*, TSCA\*\*  
(\*Enter CHEMLIST File for up-to-date regulatory information)

H<sub>2</sub>N-(CH<sub>2</sub>)<sub>3</sub>-NH-(CH<sub>2</sub>)<sub>4</sub>-NH-(CH<sub>2</sub>)<sub>3</sub>-NH<sub>2</sub>

**\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\***

8264 REFERENCES IN FILE CA (1907 TO DATE)  
248 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
8272 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
106 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> s homospermidine/cn  
L9 2 HOMOSPERMIDINE/CN

=> d 19 1,2

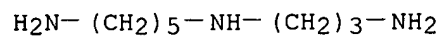
L9 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 4427-76-3 REGISTRY  
CN 1,4-Butanediamine, N-(4-aminobutyl)- (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Dibutylamine, 4,4'-diamino- (6CI, 7CI, 8CI)  
OTHER NAMES:  
CN 4,4'-Iminobis[butylamine]  
CN Bis-(4-aminobutyl)amine  
CN **Homospermidine**  
CN N-(4-Aminobutyl)-1,4-butanediamine  
CN N-(4-Aminobutyl)-1,4-diaminobutane  
CN sym-Homospermidine  
FS 3D CONCORD  
MF C8 H21 N3  
CI COM  
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS, CA,  
CANCERLIT, CAOLD, CAPLUS, CASREACT, EMBASE, IFICDB, IFIPAT, IFIUDB,  
MEDLINE, NAPRALERT, TOXCENTER, USPATFULL  
(\*File contains numerically searchable property data)

$\text{H}_2\text{N}-(\text{CH}_2)_4-\text{NH}-(\text{CH}_2)_4-\text{NH}_2$

**\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\***

168 REFERENCES IN FILE CA (1907 TO DATE)  
3 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
169 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
5 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L9 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 56-19-9 REGISTRY  
CN 1,5-Pentanediamine, N-(3-aminopropyl)- (7CI, 8CI, 9CI) (CA INDEX NAME)  
OTHER NAMES:  
CN (3-Aminopropyl)-1,5-diaminopentane  
CN (3-Aminopropyl)cadaverine  
CN **Homospermidine**  
CN N-(3-Aminopropyl)-1,5-diaminopentane  
CN N-(3-Aminopropyl)-1,5-pentanediamine  
CN N-(3-Aminopropyl)cadaverine  
CN unsym-Homospermidine  
FS 3D CONCORD  
MF C8 H21 N3  
CI COM  
LC STN Files: AGRICOLA, BEILSTEIN\*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA,  
CAOLD, CAPLUS, EMBASE, MEDLINE, TOXCENTER, USPATFULL  
(\*File contains numerically searchable property data)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

99 REFERENCES IN FILE CA (1907 TO DATE)  
2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
99 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
4 REFERENCES IN FILE CAOLD (PRIOR TO 1967)